Latin American Journal of Pharmacy
(formerly *Acta Farmacéutica Bonaerense)*
Lat. Am. J. Pharm. **40** (4): 808-12 (2021)

Received: December 27, 2020
Accepted: January 16, 2021

Sensitive Inexpensive HPLC-UV Method for Estimation of Cyproterone Acetate in Pharmaceuticals

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***SUMMARY*. A simple, precise and inexpensive HPLC-UV method has been developed for the estimation of cyproterone acetate using high performance liquid chromatography (HPLC) on C_{18} column with UV detection at 280 nm. The expected optimal assay condition comprised of acetonitrile and phosphate buffer pH 5.8 in ratio of 40:60 % v/v at a flow rate of 1.5 mL/min. Under this optimal state, detection of CA with good resolution and retention time less than 5 min were attained. The method was proved to be linear in the range of 200 to 600 ng/mL and 0.9996 regression values was obtained for CA. The percentage recovery of CA was ranged from 98.25 to 99.17 %. The precision and selectivity of the developed method was good and can be used for the estimation of CA in pharmaceuticals.**

RESUMEN. Se ha desarrollado un método HPLC-UV simple, preciso y económico para la estimación del acetato de ciproterona mediante cromatografía líquida de alta resolución (HPLC) en columna C_{18} con detección UV a 280 nm. La condición de ensayo óptima esperada comprendía acetonitrilo y tampón fosfato pH 5,8 en una proporción de 40:60% v/v a un caudal de 1,5 mL/min. En este estado óptimo, se logró la detección de CA con buena resolución y un tiempo de retención de menos de 5 min. Se demostró que el método es lineal en el rango de 200 a 600 ng/mL y se obtuvieron valores de regresión de 0.9996 para CA. El porcentaje de recuperación de CA varió de 98,25 a 99,17%. La precisión y selectividad del método desarrollado fue buena y se puede utilizar para la estimación de CA en productos farmacéuticos.

KEY WORDS: cyproterone acetate, HPLC, pharmaceuticals.

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ISSN 0326 2383 (printed ed.)
ISSN 2362-3853 (on line ed.)